MEDICAL APPLICATIONS OF OZONE AND HYDROGEN PEROXIDE

Bio-oxidative therapies have been used successfully for a century in Europe to combat a range of diseases including cancer.

A treatment system that mixes ozone with steam can be readily set up for home use and reportedly produces excellent results.

by Carmi B. Hazen © 2006

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zone, an allotrope of oxygen, has been utilised very effectively for nearly 100 years in disease therapies in Europe, but isn't well known elsewhere. The therapeutic effects of the unstable gas and its similar reactive substance, hydrogen peroxide, have been well documented. These substances are proven safe and effective treatments for virtually all pathogenic organisms that infect the human body.

The enriched ozone gas is created from regular oxygen, which is re-formed by splitting the outer shell electrons of the oxygen molecule into two single or "singlet" molecules. In nature, odd-order atomic electron orbits are unstable and will bind with other substances which, in this case, are other oxygen molecules that remained intact. This electron binding creates a new and unstable isotope that contains three electrons in the outer shell. The substance created is ozone.

The excitation force to cause the reaction can be an electrical discharge such as lightning, or ultraviolet radiation from the Sun, or artificial light. The ozone is unstable and seeks out other atoms that have odd-order electrons in their orbits—as do free radicals, which are malformed cells that can produce mutants if they survive and can cause disease. Oxygen is re-formed when the ozone molecule and a free radical bind together, neutralising the electrical energy of the defective cell. The free radical cell, now killed, is simply gobbled up by the granulocytes, leukocytes and neutrophils (the macrophages) and delivered to the body's elimination organs for proper disposal.

Bio-oxidative (oxygen/ozone) therapies have existed in Europe since World War I, but up until recently have been illegal in the United States. Some States are now allowing its use, but many doctors are afraid to jeopardise their practices by promoting these effective modalities which, so far, are not approved by the Food and Drug Administration (FDA) and the American Medical Association (AMA) and are not likely to be any time soon.

Ozone can be introduced into the body by several methods. Blood infusion, called *autohaemopathy*, is a process where oxygen and ozone are infused into the blood and reintroduced into the patient. Other methods include sauna/steam bathing, vaginal, rectal and ear insufflation, and the use of sealed bags and containers. Lately, rectal insufflation has been shown to be nearly equal in effectiveness as autohaemopathy, thus allowing for application without medical supervision and making home treatments possible. The liver receives the most benefit from rectal insufflation, as blood in the portal vein becomes "superoxygenated" by the ozone present in the rectal cavity, the enriched blood thereby delivering higher-than-normal levels of oxygen into the liver where it destroys viruses like the debilitating hepatitis pathogens.

It is advisable that anyone considering the use of oxygen therapies seek consultation with a qualified ozone therapist in order to determine potential risk. Although the technology is the safest known, there are some contra-indications where these methods should not be used. Persons taking MAO (monoamine oxidase) inhibitors or who exhibit severe cardiovascular instability, have thrombocytopaenia or a hypothyroid condition should avoid this technology.

Ozone has a selective effect on the cellular structures of the body and thus is an ideal pathogenic devitaliser. Healthy and diseased cells differ in their electrical polarities, and it is this potential difference that causes ozone, with its negative electrical charge, to be either attracted or repelled. All pathogens including viruses have weakened negative electrical charges on their outer coatings, making them appear to be positively charged; this is what attracts the ozone molecules.

This electrical attraction ability is important, as Western allopathic medicine has few effective treatment modalities for many viral infections.

Colds, influenza, herpes, candida, Epstein-Barr virus, necrotising bacteria and virtually all known conditions from any origin respond to some degree to the introduction of ozone, and many microbes are completely destroyed on contact with the unstable element.

Answering the detractors

Opponents of oxygen therapies point out, incorrectly, that ozone is a powerful oxidiser and creates large quantities of free radicals which are thought to be harmful to the normal healthy cells of the body. Exactly the opposite is true! Free radicals are components that have lost an electron in their outer shell, causing

the more positively charged nucleus of a cell to be exposed to the immediate environment. Chain reactions can occur as the unbalanced condition can cause a cascade of electron disruptions like a line of falling dominoes. Oxygen and/or ozone do not steal electrons but donate them—the opposite of the definition of a free radical. In fact, normal metabolism requires free radicals for the ORP (oxygen reduction potential) of oxygen to break down wastes so that they can be eliminated by the body's organs. Oxidation is required for this process to take place, so to infer that oxygen is harmful and causes damage is absurd! Just see how long you can

hold your breath! (Note: My description of the electrical charges on the surface of the cell and its centre is simplified here, but the main point is that charge potentials attract or repel oxygen molecules.)

Once neutralised, the organism is destroyed, mopped up by the circulatory system and excreted from the body, mostly in the form of urine. Incidentally, urine is clean and can be re-introduced into the body to provide fluids that stimulate the immune system. It's okay to drink it. It's not great to think about, but it's not

harmful, either. There are some alternative therapies that use a patient's urine to strengthen a sluggish immune system. Dr Virginia Livingston-Wheeler (now deceased) perfected a cancer "vaccine" made from the patient's own urine. Dr Burzynski's antineoplastins are also derived from human urine, which contains numerous critical enzymes that are required to sustain health. Urine has been used for centuries in the treatment of diseases.\(^1\)

Ozone is selective and has no known detrimental effects to healthy cells when applied at proper therapeutic levels which have been clinically established and are well documented. Range tolerance is quite wide, so indiscriminate use poses little hazard to the user, although it isn't advisable to experiment with the substance unless levels and exposure times are accurately measured and documented, as is common practice in any treatment modality.

Healthy cells are not affected by therapeutic levels of ozone, as they possess protective enzymes that are lacking in diseased cells. Buffered layers of tocopherols (vitamin E), ascorbic acid (vitamin C), superoxide dismutase (SOD, a natural substance in the body), catalase, uric acid (also existing in the body), glutathione peroxidase (a substance created in the body from nutrition) and reductase all protect the healthy cells from the oxidation reactions of ozone. The reaction to ozone results in nearly instantaneous conversion to water, so there is no lingering of free radicals as there is with normal oxidation overload or reactive oxygen species (ROS). Ozone concentrations over extended periods of time are toxic as well, as are concentrations exceeding $80 \mu g/mL$. The window of effectiveness has been determined to be between 3 and 80 μ g/mL. Peaks are often found at 4, 27 and 40 μ g/mL. Concentrations above 100 μ g/mL have been found useful under certain criteria. Accurate gamma measurement and exposure times are critical, so anyone who wishes to experiment with ozone should obtain a degree of knowledge so as to utilise the technology safely. Opponents of oxygen therapy attempt to

scare people from using the technology on the basis that the oxygen is itself like a free radical, when in fact it is a free radical scavenger. They incorrectly claim that the presence of high levels of singlet or nascent

oxygen is harmful and can cause disease, which of course it cannot.

Referring to hydrogen peroxide (identical in action to ozone gas), Dr Kurt Donsbach in his book Oxygen, Oxygen, Oxygen best describes the action upon the body as follows:

"The most misunderstood aspect of hydrogen peroxide is the contention that it is a free radical. This is simply not true! First of all, let's define a free radical. It is an element or compound which has an unpaired or unmatched electron. This lack of balance causes this substance to have very reactive character. However, it must be noted that these free radicals are very shortlived—usually in the one tenthousandth of a second range. But during this short time, these free radicals can cause damage by joining with other body chemicals and changing their character, sometimes

even producing a chain reaction by creating new free radicals that carry on. That is the bad side. There is also a good side to free radicals, but let us see what happens to hydrogen peroxide when it first enters the body through the blood stream, which could be from oral ingestion or by infusion.

"Hydrogen Peroxide + Catalase = Water + O

"When hydrogen peroxide enters the blood stream, an enzyme which is very prevalent in the human body almost immediately breaks it down to water and atomic oxygen, also called singlet oxygen or free radical oxygen.

$$"O + O = O_2$$

"Again in less than one ten-thousandth of a second, the atomic oxygen has become stable O_2 oxygen by pairing with another atomic oxygen. O_2 is the kind of oxygen the human body uses all the time. There is no time for the unstable oxygen to get into a cell and cause any damage."

Ozone stimulates the production of interleukin II and tumour necrosis factor by the leukocytes (white blood cells) which then

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increase in quantity to meet the demands of impending increased infection. The increased white blood cell production is very damaging to cancer cells—similar to highly skilled and well-armed military reinforcements being called up to join in the battle. The increased level of white blood cells as a result of the stimulation of the circulatory and lymphatic systems is quite pronounced, but never exceeds the optimum concentration

required by the body—as can happen in many disease conditions where the cells are not healthy, having lost much of their electrical potential across the trans-membranes of their cytoplasmic outer coatings and then rapidly reproducing uncontrolled manner, displacing everything in their path. The major distinction between healthy and diseased cells is the reduced electrical potential of the diseased cells' outer membranes, which makes them vulnerable to treatment methods developed to reduce their energy further, to the point that they

die or flame out, so to speak, or they are overloaded with extra energy that explodes them—as is what happens when the highly negatively charged oxygen molecules are present, which collide with them due to electrical attraction.

Consider healthy cells to be like fresh flashlight batteries, and diseased cells to be the last vestige of light that remains as the batteries go dead. Unlike weak flashlight batteries, sick cells still produce enough energy to remain alive and do so by fermenting sugars. They are forced to increase their metabolism to remain alive in an incredibly inefficient fuel-consumption frenzy, desperate for anything that they can consume. It's analogous to burning the deckchairs on the *Titanic* to keep the boilers running after the coal bunkers have become flooded.

Ozone absorption through the skin

The skin, being the largest organ of the body, will absorb large quantities of ozone when mixed with steam, making a steam bath a good method of application. The ozone gas, mixed with the vaporised water molecules, is rapidly absorbed through the dermis (skin) and converted instantly to oxygen, which is absorbed by catalase in an enzyme reaction, then manufactures ATP through a complex nine-stage process known as the Krebs citric acid cycle. The resultant ATP is the fuel that our cells burn for their energy. Complete combustion of the ATP results in byproducts consisting of carbon dioxide and water. When incomplete cellular combustion occurs, the effluent is then carbon monoxide and lactic acid which accumulate in the body fluids, reducing oxygen absorption and thus setting the stage for the development of disease.

A failure to eliminate the waste products of metabolism is the prime causative factor in the establishment of disease. Germs follow later in this process and are not the cause of the condition but are the result of it, being natural scavengers that exist dormantly within us until called upon to transform or morph into appropriate forms intended by the Creator to clean the trash and remove it from the body—which they fail to accomplish because of the sustained polluted condition of the body fluids.

The steam method of applying ozone/oxygen to the body compares favourably with hyperbaric oxygen chambers such as those utilised by deep-sea divers to prevent nitrogen narcosis of the blood. Steam tents and modified non-pressurised custom chambers provide an affordable way to apply ozone to the body in a non-invasive way. The conversion of the ozone into oxygen using mixed steam is as effective, if not more so, than the use of pressure chambers because treatments

can be cheaply and regularly performed without significant overheads. Ozone application

overheads. Ozone application through the skin is called transcutaneous ozonation. Ozone can be applied through the use of elevated oxygen pressures, or steam or infrared illumination using special energy-emission panels. There are some dangers from immersion in pressurised oxygen chambers, as some eye damage has been reported in a few cases.

This technology is best left in the hands of professionals, even though

some forms of these chambers can be purchased for personal use. I do not recommend these at-home chambers. Steam and infrared illumination methods are safer and cheaper, and also have the great advantage in that they cause profuse sweating—an excellent method of detoxifying the body and eliminating toxins, chemicals and contaminated salts, thus helping to restore the sodium-to-potassium balance while reducing the toxic load on the liver and kidneys.

Oedema (watery fluid build-up) can be somewhat controlled with saunas. The public has been conditioned to believe that



"Okay, Father, we start with DVD mini plasma screens in the confessionals..."

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excess salt intake is responsible for many health problems, when in fact it is the ratio between absorbed potassium and salt that causes oedema and heart damage due to fluid build-up in the pleural cavity (the area above the diaphragm that contains the lungs, heart, etc.). Vitamin D plays a major role in the uptake of potassium and phosphorus in the gut, so it is advisable to get adequate amounts of sun exposure on a regular basis without sunscreen or sunglasses. As long as you avoid getting a tan, there is little danger of developing skin cancer. It is the lack of adequate sun exposure that is the danger in developing melanomas. Melanomas should *never* be surgically removed, as using a knife will almost guarantee the spread of these highly aggressive and very deadly pigmented cancer cells. Only caustics, lasers (in the hands of a skilled operator) or high-gauss negative stationary magnets should be employed in their removal.

Low-sodium diets and the consumption of diuretics may reduce the excess water accumulation momentarily. Low potassium concentrations within the cell and the necessary sodium outside

the cell form the chemical battery that maintains the trans-membrane electrical potential of the cells to levels above the 70 millivolts which is required to keep the cells healthy and active. Reducing only the sodium does not correct the problem and weakens the cells by lowering their electrical potential, which in turn greatly increases the chance of developing serious disease. Cancer cells become flooded with sodium, displacing potassium, and all DNA logic becomes dissociated with cellular reproduction.

Commercial salts are poisonous to the body and should be avoided in our diet. Sea salts or salts mined from the Himalayas contain large amounts of natural minerals that the body requires for proper functioning. Sea salt contains high levels of organic iodine which the thyroid gland requires and uses to manufacture specialised enzymes that aid adrenal function and the fighting requirements of those enzymes critical to the prevention of disease. *Hypothyroidism* (low-level thyroid activity) is a major epidemic, causing low cellular metabolism and low oxygen cellular uptake, creating an

ideal contaminated environment of filthy body fluids, ripe for the development of disease, primarily cancer. This low oxygen absorption due to heavy fluid contamination is known as *hypoxia*, and this starvation of oxygen is the singular cause of virtually all disease.

Dr Otto Warburg was awarded the 1931 Nobel Prize in Physiology or Medicine for his work on the respiration of enzymes, having discovered the shift in cellular metabolism from oxygen uptake to sugar fermentation—the trigger condition for the development of cancer. In 1966, Dr Warburg presented a speech to Nobel laureates in which he outlined the methods required to turn cancer into a curable disease.²

The effect of oxygen on disease pathogens

When healthy cells are invaded by a virus, the cellular machinery is hijacked and the cell loses its most complex function, that of creating a protective outer coat called the *protoplasm* or *cytoplasm*. This dual-layer shroud contains a membrane that carries a positive electrical charge on its internal surface and a negative electrical charge on its outer surface.

The *Golgi apparatus*, a component part of the cell, a material factory so to speak, breaks down proteins and manufactures enzymes, producing among other things the enzymes that are utilised to form the outer protective shell of the cell. ³ This mechanism becomes disrupted when the DNA of the cell is invaded by the virus, which splices itself into the DNA/RNA strand. The high-order functions of cellular construction instructions are subsequently lost and the protective coating no longer forms correctly. In some cases, an outer shell of any crude composition doesn't form at all. Weak protein bonds are formed and the materials that are normally assembled to form the cytoplasmic walls of the cell do not combine but form solid crystals. The binding proteins and these crystalline panels often assemble into a beautiful geometric shape consisting of 20

equilateral triangles known as an icosahedron.⁴ Virtually all capsid-envelope viruses take on this form, although there are many exceptions (helical forms being just one example).

Regardless of the shape or form of the infected cell, they each have a common weakness: the outer coating is weakly bonded and thus is vulnerable to the ravages of many forms of vibratory energy impingement, ranging across the energy spectrum from sound waves into the wavelengths of the 49th octave (visible light) and beyond into ultraviolet. When oxygen

encounters a wavelength at 189 nm (its peak), molecular electron splitting occurs and ozone is formed.

Because the diseased cell has lost a significant portion of the electrical potential between the inner and outer surfaces of the outer membrane, the voltage or potential level of the cell is reduced to the point that the force that held electrons in its orbit shell becomes so weak that electrons drift off into the spaces between the cells; these electrons are known as *free radicals*. The weakened cell, although still negatively charged on its outer surface.

appears to be positive with respect to the nearby oxygen molecules with their more negative electrical charges and the superoxygen molecule, ozone, with its massive negative charge.

When the diseased cell and the ozone/oxygen molecule become attracted to each other, the speed and force of the attraction increases exponentially to the point that when molecular collision occurs it happens at the speed of light, and upon contact the resulting electrical discharge produces a burst of ultraviolet light. In other words, a small atomic explosion occurs when these two opposite charges join together, and in the dissipation of the residual energy the life force of the cell is extinguished. Mission accomplished!

It should be obvious at this point that oxygen in all of its forms is vital for sustaining life by the continual destruction of disease pathogens. The problem remains, however, as to how to get the ozone/oxygen elements into the nooks and crannies of the body,

Sea salts or salts mined from the Himalayas contain large amounts of natural minerals that the body requires for proper functioning.

thereby initiating the collision process between these electrical titans

Transcutaneous ozone application via vaporised steam

There are several ways to apply ozone to various areas of the body, and I may cover these methods in future writings. The scope of this article focuses on one simple application method that produces astonishing healing results.

Ozonated steam, correctly applied to the body, will destroy the viruses that cause many diseases including the common cold and its more severe form, influenza or the flu. I have been using this technology for 10 years, and the process only failed me once in the very early stages of my education when I improperly applied it during a significantly more severe illness. Since that time, the ozonated steam system I developed has succeeded in completely

curing every disease condition that has so far been exposed to it.

My system consists of a slidingglass-door shower stall topped with a plexiglass bubble known as a shower dome. The manufacturer failed early in the introduction of this necessary component that is required to convert an ordinary bathtub/shower combination into a steam chamber.

Next came a commercial fixed steam generator, as was once found in some hotels across the country. The 240-volt 6-kW generator more than adequately fills the space within

the enclosure with high volumes of steam, reducing visibility to a foot or so.

Next came the ozone generator. I purchased a laboratory-grade generator and a paediatric regulator that utilises a CGA-540 gas fitting, thereby allowing the use of cheaper welding-grade compressed oxygen, rather than the identical oxygen gas supplied in medical-grade bottles that use the pin-index valve known as the CGA-870 and requiring a prescription to exchange/fill replacement oxygen gas.

Last, a military surplus gas mask was converted for breathing fresh external air via a plastic hose protruding through a fitting installed through the shower dome canopy, extending into my attic.

The total cost of the installation was about US\$7,000. Don't panic: all of this is overkill! Today, a comparable portable

system can be assembled for under \$500. Here is what you need:

- A portable steam tent with generator pot @ \$100-\$275 delivered. These can be found on eBay if you search the words "Steam Sauna".
- The Enaly EOZ-300Y ozone generator @ \$60 delivered; also found on eBay.
- Pediatric Oxygen Regulator CGA-540 0-4 LPM Model REG5404E, available at http://www.cramerdeckermedical.com/product.php?product_id=42; or The Fish-flo II oxygen regulator found at http://www.roysbait-tackle.com/livewell%20systems/FISH%20FLO2%202.htm.
- Compressed welding oxygen, 20 to 80 cubic feet. A 20 CFM bottle will last approximately six months with daily usage. Purchase the tank at a local welding supply store. It is illegal to ship compressed gas through most carriers. A used 20-cubic-foot

tank should cost about \$90 filled, with subsequent exchanges costing about

Some people use generators incorporating ambient air or oxygen concentrators. I don't recommend them for many reasons, gas flow precision regulation being my main point of contention. Some complete systems are on the market that are designed properly and can accommodate the use of ambient air; these are fine to use.

Set up the steam tent and introduce the ozone output from the generator through any opening in the tent.

Avoid breathing the ozone gas as it irritates the linings of the lungs. I suggest using a fan to blow fresh air across your face while sitting inside the tent with your head protruding from the top. Use an oxygen flow rate of 1/8 to 1/2 LPM and limit each exposure to about 20 minutes. In my chamber I use 1/8 LPM. The lower the flow rate, the more ozone is created, however in lower concentrations. Flow rates in excess of 1/2 LPM will not make enough ozone to be effective.

For stubborn ailments, take several steam baths spread throughout the day with resting periods of an hour or more. After a session, it is advisable to exercise or receive a lymphatic massage to move the lymphatic fluids throughout the body. A small rebounder trampoline is excellent for pumping the lymphatics. One to three minutes of light bouncing is often sufficient.

When oxygen encounters a wavelength at 189 nm (its peak), molecular electron splitting occurs and ozone is formed.

Endnotes

- 1. http://www.shirleys-wellness-cafe.com/urine_martha.htm
- 2. http://www.stopcancer.com/ ottolecture3.htm
- 3. http://users.rcn.com/jkimball.ma.ultranet/BiologyPages/G/Golgi.html
- 4. http://www.cgl.ucsf.edu/chimera/icosahedron05/icosahedron.html

About the Author:

Carmi B. Hazen is an amateur medical researcher and investigative journalist with an interest in energy medicine. For the last five years or so he has been collecting medical books dating from

the late 1800s through to the mid-1930s. At that time, pharmaceuticals were far less prolific than they are today, and energy treatment methods were well established and in common use in many medical practices.

Carmi has a museum of sorts, containing numerous electrical and light apparatus that were commonly found in medical offices, mostly in the London, England, area. Much of his research has been in recreating the Rife machine energy technology. He has found a way to cure the common cold with a form of charged oxygen gas therapy; it devitalises or kills some viruses *in vivo*.

He discovered the carbon arc method of intestinal parasite elimination by his own experimentation. Carmi Hazen is the author of an e-book titled What They Didn't Teach Your Doctor In Medical School and re-published a classic medical book from 1913 titled Cancer: Its Cause And Treatment Without Operation by Robert Bell, MD; see http://www.lulu.com/comdyne and review in NEXUS 13/04. His article on "Parasite Elimination Using the Electric Carbon Arc Lamp" was published in NEXUS 13/04.

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